THE CANNON

The Politically Correct Newspaper of the University of Toronto Engineering Society, Est. 1977

Vol. 12 December 1, 1994 No. 4

"...They Say Cutback; We Say Fight-back!!!!"

BY HOVIG JOHN KHAJADOURIAN
CHAIR, FUTURE OF EDUCATION COMMITTEE
CHEM 9T6

That was the chant heard by Human Resource Minister Lloyd Axeworthy on Parliament Hill in Ottawa on November 16th at the largest student protest this country has ever seen. One hundred and fifty engineering students along with three hundred and fifty students from other faculties from U of T joined some fourteen thousand other post-secondary students from institutions across the country in protest to the 'proposed' federal cutbacks of $2.6 billion in education transfer payments to the provinces. This move would ultimately leave students with tuition fees in the range of $5000 - $8000 within two years. To me and many others, this would be unacceptable. Together, we can pool all our resources and work to stop this proposal which would change the face of Canadian Society. By joining the Future of Education Committee you can help to make a difference.

Engineers on Parliament Hill

photo courtesy of Nick Colonna

"...burden of upwards of $55000 upon entering an economic job market with very few well paying jobs."

The minister has said that in order to compensate for higher tuition fees, the government will provide more in the way of student loans. Although this may seem like a viable solution, simple math will show that four years of tuition alone will cost $20000 - $32000 dollars. Add to that, a conservative estimate of $700 per year for books and school supplies and you are already at about $23000 - $35000 dollars for four years of education. Assuming an interest rate of 10%, you are looking forward to a debt of somewhere between $30000 - $45000 as a federal graduation gift...this is assuming that your living expenses are zero. Add in about $5000 food and accommodation costs per year and it is conceivable that students may have a loan burden of upwards of $55000 upon entering an economic job market with very few well paying jobs. Now I ask you, does this seem to be a viable 'plan for the future' of Canada?

Unfortunately the honorable minister has overlooked a few minor details. Almost immediately, full time enrollment in post-secondary institutions will drop dramatically. Students will not be willing to take the debt burden that the federal government will be forcing upon them. This will leave schools with less money for essentials such as lab equipment and facilities as well as inadequate funding for research and cuts in staff resulting from lower enrollment. Although class size will decrease and quality of education may increase, only the rich and truly elite in society will be able to afford a post secondary education. Programs considered by the schools to be 'less important' such as the U of T forestry program, will be cut totally. Only those programs with high demand will remain. Education for the sake of education or interest will no longer have any meaning. Although tuition for students will increase, schools will not be seeing any increases in funds. The only difference to them is where the money will be coming from. Secondly, unemployment will increase for two reasons. As technology and society advance, jobs require more highly skilled, highly trained workers. You now have undereducated, inexperienced youth graduating from high school with nowhere to go except the already overcrowded blue collar sector. This generation, whom I will call generation 'Y'(as in 'y' me?), will have to compete for jobs with thousands of other more experienced currently unemployed workers. This will lead to exploitation of those workers, as well as an increase in crime, poverty, and dependence on other social programs such as UI and welfare which incidentally are also being 'reformed'. The second increase in unemployment will come from the decrease in industrial expansion and technological development due to the decreased educated talent pool who create jobs. Less money will be spent on investment and pretty soon, many companies will leave Canada in search of countries with workers who have the skills they require. Thirdly, it will lead to an increase in unpaid debts to the government as thousands of graduates default on their loans due to unemployment, thereby increasing the national debt.

"...increase the transfer payments, not the debt burden for students."

In Ottawa, at the student protest, minister Axeworthy courageously came out to address the angered crowd of students. He told us that he was not responsible for any tuition increases resulting from the cuts in transfer payments and that he was actually increasing availability to universities. He continued on to tell us that this was good for us and that we should accept it because it is the only solution to the massive deficit. He said that we should begin to take responsibility for our own education because we would be the sole benefactors of an education. To this I strongly disagree. I believe that by educating people, you are investing in the future of our country. Highly skilled, highly educated Canadians will sustain the high standard of living, create jobs, earn more money on which they will pay higher taxes and be less of a burden on society. They won't need expensive social programs such as welfare and UI. Like many students, I work part time during the school year to help pay for my education. With the current system, I become ineligible for a government loan because I work. Students who do work part time should be rewarded for their 'responsibility' not penalized. I really don't feel that I am part of the elite as I sit eating my Kraft dinner and Campbell's soup after fishing for loose change between the cushions of my second hand couch. Students live *below* the poverty line. I am all for responsibility however, may I remind you good minister, that it was your generation and the generation immediately before us that ballooned the deficit to $40 billion dollars, not us. Why should we suffer and have to face the consequences of those of you who benefited from a cheap education. I find it hard to sit there and be lectured on responsibility and eliteness by someone who attended an Ivy League university in the U.S. Did you pay for your own education Mr. Axeworthy? I further feel that by opposing these cutbacks, I am being a responsible Canadian in trying to minimize the damage that they will cause. If you want to help us, dear minister, increase the transfer payments, not the debt burden for students.

Near the end of the minister's speech, he challenged the students to sit down with him and discuss alternative ways to undertake the reforms he is proposing. At the time, I considered it a genuine invitation and planned on writing a letter and attending the town hall meeting at the Royal York Hotel from Nov. 29 to Dec. 1. However, students who have tried to meet with him, have found the minister to be unreceptive, unprepared and disinterested in what they have had to say, and this was after he showed up more than half an hour late. He knows that only about 15% of the population under the age of twenty-three ever vote in federal elections. He knows that our financial resources and clout are quite limited and he believes that we could never have any great impact on the outcome of federal actions. Well, sooner or later (hopefully sooner) we will vote. This generation will vote in more federal elections than any generation older than us. Second of all, why were there hundreds of SWAT team agents hovering around the protest? Why was the military base in Petawawa put on standby alert? I think he is having nightmares of his French counterpart who tried the same thing and was met with over fifty thousand enraged students who stormed the building. Well, enough is enough! Your government had promised to undertake a task of deficit reduction, now you are looking for the fastest, easiest way to do it. Rather than begin reforming government which may take years, and for which you may receive no credit, you're trying to stomp on the little guy. Why not begin deficit reduction by trying to collect on some of the $9 billion dollars of unpaid debts to the government? Then try reducing the $12 billion dollars you spend on defense against fictitious enemies. Cut down on social program abuse and reform mismanaged government corporations. Then try reforming unemployment insurance and give us employment assurance through increased education. You have said it yourself, you want to help people get off welfare by educating them. Consider this, the deficit didn't just magically appear overnight, and it won't easily just disappear without major consequences to the well being of Canada.

Further pursuant to the proposed federal funding cuts, the University of Toronto Engineering Society has created an emergency standing committee called the Future of Education Committee of which I have been named chair. I appeal to everybody to somehow get involved in stopping these absurd proposals from becoming reality. Over two hundred people had signed up to go with us to the protest in Ottawa. The University of Ottawa graciously provided available space for us to stay overnight, but only 150 people from our faculty showed up. Even the Dean of Engineering, in a strong sign of support, asked all departments to postpone tests and assignments so that more people could attend. But people responded with "will it make a difference" and "I've got something more important to do". I ask you, WHAT COULD BE MORE IMPORTANT THAN YOUR FUTURE? Isn't education the reason that you're here? If you won't be here

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FREEDOM OF EXPRESSION

Have You Met Stephanie?

BY JULIAN WRIGHT
IND 9T7

A few weeks ago, during U of T day, I came across a pamphlet that has been distributed to companies in order to promote engineering at U of T. The purpose of this pamphlet was to describe the various departments within engineering, the career centre employment services and events, and what constitutes a typical engineering undergraduate student at Skule™.

In the faculty's view, Stephanie is a typical engineering student. "Stephanie has maintained a better than 90% grade point average and has supported herself by working part-time during the school year and at engineering-related positions in the summer." The pamphlet further stated that Stephanie participated for 16 months in the PEY programme. It ends by claiming that Stephanie is "representative of students" in our wonderful faculty.

Do you know Stephanie? Have you met her, spoken to her, had a drink with her? No! Because she is at home or in a library right now doing her homework! Stephanie can be described in two words: SUPER KEEN. She probably looks forward to coming to Skule™ every day for 5 hours of lectures. She does not look at her problem sets as hard, dull, or even frustrating. Rather, she finds them fun, exciting, and a darn good way to spend a Friday night.

I have never met anyone who has been able to obtain such high marks and have a part-time job at the same time in engineering. This might be so for one or two people, but it is certainly not representative of the majority of students at Skule™. Many of us work our tails off just to get a 70% and don't have time to partake in a part-time job. Or much of a social life, for that matter.

Distributing a pamphlet with such false propaganda is misleading of the real students at U of T. Acheiving a 90%, having a part-time job, and working during the summer is misleading as it makes engineering look easy with a lot of free time. Currently, the faculty has said that it is working on changing the pamphlet but, realistically, it will be a while before it is actually changed.

Many of us would like to meet Stephanie. If you have any information regarding her location, programme, year, or actual existence, please let me know. □

Who Will Pay?

BY VERNON NAIDOO
MMS 9T4 + 1 + PEY

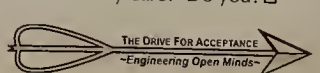
In addition to being the coordinator of The Drive For Acceptance, I am also an executive member of the LGB-OUT (Lesbians, Gays, and Bisexuals Of the University of Toronto). As such, one of my objectives is to keep Engineers in touch with Queer events on campus.

In early November, I was involved in posting signs for the Homo Hop, a dance which LGB-OUT holds at the SAC Hangar a few times each year. Even though the posters were hung on boards owned by the Engineering Society, each one bearing the required red "SKULE™" stamp of approval, and regardless of LGB-OUT's status as an official, recognized, U of T student group, these posters were ripped down on a daily basis--sometimes within hours. Since it often happened during school hours, there must have been several witnesses. Did anyone say anything?

Is the atmosphere in Engineering one that condones (through inaction) the oppression of some of our own people? Will no one challenge hateful behaviour for fear of losing friendships? It becomes difficult for me to convince others that Engineers are not as narrow minded as they are often depicted when I, myself, am sometimes unsure.

If these people feel threatened by the presence of a few gay people in Engineering, they are in for a surprise. Toronto is a haven for Queer culture. They will soon discover that gay, lesbian and bisexual people are not as rare in the outside world as they falsely appear to be here. It makes me wonder how they will adjust. It will be easy enough to avoid a gay neighbor or ignore a distant lesbian cousin but will they also terminate every friendship with people who "come out"? How will they deal with a bisexual brother or sister? And, what if they have queer children? Will they put them out on the street in an attempt to make them heterosexual? Will they wind up contributing to the one in three teen suicides that are committed by lesbian or gay youth?

Do they care? Do you? □



There's Too Much Caffeine in Your Bloodstream

BY KNUCKLES
ENG SCI 9T6

No doubt, most students have tried coffee by this point in their lives (or at least smelled it), so you should all know what's so great about it, and why almost every girl and boy and prof are running into the shop-across-the-street to get one (even while one should be making Xerox copies in the basement).

Well, actually, I don't quite understand it. Let's try to demystify coffee with the aid of some real-life stories. I can think of two reasons why people drink it. First, it has caffeine and caffeine is a good substitute for sleep, right? OK, let me relate to you a story from my first year. My mother knew I was stressed out about midterms and was staying up late trying to understand the first chapter of a terrible Berkeley text that had sketches of ravioli so she gave me these yellow pills and told me to take 4 or 5. They were to help me stay awake longer.

I foolishly said OK and took these yellow pills which I later found out were caffeine PEP! pills. I was so short on sleep that week that I slept through my PHY180F midterm. I mean, I made it there, but then I fell asleep at my desk, and it wasn't the air of McLennan. This wouldn't have been so bad, except that I got 21%. (They gave me credit for my diagrams.) I also got 26% on my chemistry midterm which, for the purpose of this article, I will say is because of lack of concentration (due to lack of sleep). So, having caffeine instead of sleep, according to me, is not a good thing.

I hear bad things about caffeine. I heard about a guy on the radio who was an "x-pots-of-coffee drinker" who ended up with a massive heart attack at age 25. Less seriously, I have a friend who doesn't seem to handle caffeine well. The few times she has tried it, she acts weird. Combined with her daily dosage of chocolate, she becomes trippy, giggly and incoherent. More so than usual.

Drinking coffee seems to be an "in" thing to do. Not just drinking it, though, but drinking it in a coffee shop. More specifically, I mean the Second Cup erected in honour of engineering students on the other side of College. Perhaps it's the dark green and gold aura of Second Cup, or the Hooked On Classics tape playing in the background. Maybe it's the friendly staff there, asking you what you want before you can see what they have.

I used to think that going to the Second Cup was a chic thing to do everyday for at least an hour. This term, it had been a ritual: three of us going there to drink "kawfee" and tell/listen to stories about ex-boyfriends, embarrassing moments, ex-boyfriends, fights with good friends, ex-boyfriends, problem sets and ex-boyfriends.

One day, I just snapped. I couldn't take it anymore. I had to decline the daily offer of going to the Second Cup. It might have been the sign on the toilet door that said "please do not plub the toilet" that bothered me, but I think I just got bored. I didn't want to sit in that smoke-filled room and drink my black coffee, hearing about ex-boyfriends and diets while guiltily eyeing the cream and sugar. I didn't have the poise of a coffee drinker, nor the money to drink the special coffees. I wasn't well-dressed, nor did I have the poor-but-artistic look. I didn't come in every day during the summer to the Second Cup and know the people working there. No one addressed me by my real name. I was just called "Excuse me" or "May I help you?". I was an imposter regular and I felt awkward.

I have to say, now, that I have successfully withdrawn from coffee. I really had no choice—doctors told me I was going to get an ulcer if I didn't stop indulging in nasty vices, such as drinking coffee. I drank a lot last year but this year I haven't had nearly as much. Of course, I'm tired all the time and, adding that to the new burden of commuting, I find my contacts glued to my eyeballs and my eyelids glued shut. Even Nirvana couldn't keep me awake.

It's now been a few weeks since I started this article. I've noticed things though—I'm sensing that fewer of the people I know drink coffee. Sure, I still endure a certain person's coffee-breath, but our band of three no longer goes drinking coffee together and I don't miss it at all. The Second Cup aura was beginning to make me nauseous.

But then again, maybe that's a withdrawal symptom... □

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THE CANNON

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Information
The CANNON is a monthly publication of the University of Toronto Engineering Society, with a circulation of 4000 copies throughout the U of T St. George campus. The mandate of the CANNON is to publish information that is pertinent to the interests of the engineering student body. Subscription information is available by contacting Julie Wilkinson at the Engineering Society at (416) 978-2917. Advertising rates, production deadlines, and other pertinent information can be obtained by contacting the Engineering Communications office at (416) 978-5377.

Disclaimer
The CANNON is a vehicle through which undergraduate engineering students can express their opinions. The views expressed herein are those of the author and do not necessarily represent those of the editors or the Engineering Society unless so indicated.

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Keep Federal Cuts to Tuition

Editor Seeks Controversy and (Un)Popularity with Viewpoint

BY KURT BREEDE
CO-EDITOR

On Wednesday, November 16, students from universities all across Ontario and Quebec, the Maritimes, including representatives from Saskatchewan, traveled to Ottawa to protest the finance minister's university funding reform policy. At Parliament Hill, the atmosphere amongst the student protesters was one of unity and distaste for the minister. So far, this decision has sparked some serious debate from university and graduate secondary school students across Canada, arguing that this will inevitably result in an almost one hundred percent hike-up of present tuitions within the next two years. The government has supposedly agreed to increase the number of student loans to compensate for students struggling to pay their way through university.

"...increase federal grants to students who maintain high grades"

The overwhelming negative response to this policy has raised some serious questions about the structure of our education system, and how effectively it is producing strong individuals capable of surviving in an increasingly competitive job market. As an alternative, in lieu of lowering the tuitions the federal cuts to all university funding should be kept. In addition, increase the number of federal grants to students who maintain high grades in whichever program they decide to study, and, who after financial assessments indeed need financial assistance to cover either all or part of their tuitions. Besides, based on the number of Acura Integras and BMW's that pull up to the campuses each morning, evidently not all students will be affected by these tuition hikes.

The point is students must work hard to maintain acceptable averages, both in highschool and in university. Those students who simply cannot apply themselves to a high standard of education, are best off learning trades in colleges - which often eventually lead to much more fulfilling and better paying jobs. Not everyone graduates from their secondary school with honours, and simply some students - if not most - just aren't cut out to spend four or more years studying for Bachelors, Masters, and/or PH.D's. Unfortunately, not all programs in our universities are challenging students to their full potential. In the last decade, it seems universities have been catering more so to the below average student simply as a means of drawing in more students, either as means of keeping them off the streets, or bringing in more money.

Historically, universities were intended to be 'elite' learning institutions, which produced bright minds with wealths of knowledge which graduates eventually applied to successful careers later on in life. Nowadays, universities act as adolescent sanctuaries, nurseries to which student's escape to avoid the inevitable decision of what they will do with their lives. But the blame simply doesn't lie on the shoulders of the universities or the students, but on the administrative staff and guidance councilors of highschools, who lack any sort of imagination or insight into those career opportunities best suited to students with variable strengths and weaknesses in school. Assessment of student strengths should be made before graduation, which in turn will offer the students a broader scope of what the world has to offer, and what they have to offer in return.□

It's The Holidays!

Keep The Christmas Spirit

BY ADRIENNE CHEE HING
CO-EDITOR

As the snow starts to gather and this skule™ term draws to a close, we begin to look beyond our exams and toward the upcoming holidays. Plans are underway for a period of relaxation with family and friends and there exists a possibility of time on the slopes or in the sun. As the warmth and comfort of this time of year weave into our thoughts, it is difficult not to get caught up with the spirit of the season.

While reflecting on what we have—our friends and family, warm housing and clothing, a city filled with much to see and experience—we should also take the time to consider those who are less fortunate tham we are. Possible ways by which we may illustrate our goodwill towards our fellow citizens include donating food to foodbanks, volunteering our services to prepare and serve hot meals at hostels, and donating clothing to organizations that will oversee their distribution to those in need.

These may seem like small gestures on our part but if we all make the effort, we can help brighten someone's day and provide some comfort in an otherwise harsh environment. There is a box for the *Share the Warmth* campaign in the Engineering Society (SF B670) into which we may deposit mittens, gloves, scarves, toques, coats or sweaters that we can no longer use ourselves. Blankets and sleeping bags will also be accepted.

With your help, we will be able to provide people who are less fortunate than we are with warm clothing for this upcoming season. The box will remain in Eng Soc until December 2nd. Help us fill this box and spread a little warmth this holiday season.

Good Luck, everyone, with your upcoming exams. Enjoy your Holidays and see you in the New Year!! □

ENGINEERING SOCIETY
SCITE ET STRENUE

The Cannon Wants You!

The Cannon is intended to be a forum where the students of Skule™ can voice their opinions and/or display their creative talents. We encourage you to do so by submitting letters to the Editor, reviews, poetry, prose (fiction or non-fiction), artwork, or anything else which you would like to see published. Please place submissions (if text, then on disk) in the Cannon mailbox in Eng. Soc. All material will be returned. New staff welcome.

CHARIOT RACE

The Rules of Ye Olde Grande Chariot Race

1. Eligibility

Each discipline and the First Year Engineering Class (which includes the surviving Eng Sci Frosh), And SAC's Blue Crew are entitled to enter one (1) chariot or other wheeled contraption that shall be presented by the respective Chair of the discipline immediately prior to the start of the Race. Each chariot shall abide by the following rules and measurements. Some Groups may be required to meet other requirements due to previous rule infractions. These groups will be informed of the specific needs.

2. Chariot

Each candidate shall have:

i) Two (2) accessible wheels attached to the chariot, with no human contact whatsoever, on the ground throughout the Race from start to finish (minimum wheel diameter: 152.4 mm).

ii) no sharp protruding points or other objects dangerous to contestants i.e. cutting torches, barbed wire, electric shockers, guns, knives, bombs, ICBMs, squid, fish, Elvis, etc.

iii) no maximum weight limit. Minimum weight of chariot is 13.6 kg (without driver)

iv) human propulsion only (no gas motors, sails, horses, transcendental meditation, etc.)

At the start of the Race, each chariot will be pointed out to its competitors by the Judge. (If you wonder why this rule exists, or think it is silly, then you haven't seen enough Chariot Races!!!)

3. Drivers

Each driver (charioteer) must be:

i) Human or near-human male or female, or,

ii) A member of the Engineering Society with a valid student number at the University of Toronto.

Note: if the driver is not a member of ENG SOC, He must be Gareth Spanglett, SAC president, or a reasonable hand drawn SAC Commissioner

The Driver must be eighteen (18) years of age or seventeen (17) or under and accompanied by an adult. The Driver must be contained within the chariot at all times throughout the entire Race and may not propel him/herself or the chariot during the Race. The Driver must be presented to the Judge before the Race by her/his Club Chair or representative.

4. Pushers and Pullers

Only eight (8) allowed per chariot. All must be human or near-human males/females. If the police arrive, all pushers are asked to flush their stash.

pi + 1

Participants are required to attend SUDS afterwards to brag about their exploits.

5. Blockers

Offensive and defensive - no limit. All must be human or near-human females/males. This means YOU! (creep!)

6. Offense and Defense

Rule 1 (ii) applies to all contestants, as well as chariots. It is hoped that contestants will abide by the intent of this rule which is designed to prevent loss of life, limbs, eyes, masculinity/femininity, etc.

Corollary: Anyone using axe handles, knuckle dusters, biochemical or nuclear weapons, bike chains, etc, shall automatically bring about the disqualification of his or her discipline's chariot. Blockers may not carry dangerous objects such as materials made out of metal, glass, wood, and/or plastic. Biodegradable materials that decompose in two (2) years or less, such as eggs, tomatoes, watermelons, etc, are permissible. NO SEAFOOD (see food?). No aerosol cans, smoke bombs, flames, etc. may be used by contestants or attached to chariots. All contestants are reminded to behave in a sportsmanlike manner (like in OHL hockey games).

7. The Course

The course of the Chariot Race is one lap counterclockwise around the scrap of grass beknownst to all as Front Campus. All chariots are required to proceed around the course outside of the course markers as designated by the Judge.

8. The Time

The Official Date of the 1993/4/5/.../n/n+1 Chariot Race is Thursday, January 12, 1993/4/5/.../n/n+1. The Race shall commence at approximately 12:45 pm of the aforementioned date. The start of the Race shall be marked by the roar of the MIGHTY SKULE™ CANNON.

9. Increment Conditions

Weather conditions must include at least two of the following:

On the ground:

i) ice

ii) snow

iii) slush

iv) mud

v) yellow grass

vi) 150 different kinds of cheese (no Venezuelan Beaver Cheese)

In the air (sent by God or a reasonable hand-drawn facsimile):

i) freezing rain

ii) snow

iii) hail

iv) live chickens

vi) a shrubbery

10. Winner

The first chariot to cross the finish line with at least two wheels touching the ground and still capable of rotation, and a driver still breathing (oxygen/helium) and as human as he/she was at the start of the Race, will be declared the winner if it meets all of the following qualifications. To qualify to win, the chariot must:

i) Complete the course as laid out by the Judge,

ii) Cross the finish line with at least two rotating wheels still attached to the chariot and touching the ground with no human contact or help.

iii) Have a charioteer who has been contained in the chariot all the time it has been moving. A chariot without a charioteer must stop moving until it has retrieved its charioteer. It may only retrieve its charioteer by moving backwards with regards to the course direction.

iv) The charioteer who was contained in the chariot at the sound of the MIGHTY SKULE™ CANNON and who had been declared by the owners of the chariot to the Judge before the Race, must be the charioteer at all times throughout the Race, and when crossing the finish line as set out by the Judge.

v) The charioteer may not move more than 921 mm + 0.02% (three feet) on the ground or in the air if he/she is not contained in the chariot during the Race between start and finish. For the chariot to move any further, he/she must be placed back into his/her original position in the chariot of his/her original designation.

vi) Not be the First Year Chariot.

vii) Definately not the SAC Chariot.

11. The Prize

The winning team will receive the J. P. Potts Memorial Trophy plus some other unknown prize.

12. Inspection

The chariots shall assemble on Front Campus at 12:30 p.m. sharp on the day of the Race for inspection by the Judge. Nothing can be added or subtracted from the chariots after the inspection.

13. Disputes

The Judge is hereby declared to be infallible. Consequently, all arguments shall be decided by the Judge whose decisions shall be final (see The Rise and Fall of the Roman Empire).

14. Wavers

Each discipline is allowed an unlimited number of people to wave at the participants.

14.5. Waivers

All blockers, pullers, and charioteers must sign the waiver forms before the Race. Anyone who refuses to sign and then races or otherwise participates does so at his/her own risk. Anyone who has read these rules and/or participates in the Race hereby acknowledges the element of risk involved to his/her own person and shall not hold the Blue and Gold Chair, especially the Glue & Bold Chair, the Engineering Society, the University of Toronto, or any other individual or institution, responsible for the consequences of his/her own actions and/or decision to participate. All spectators within a two hundred yard radius of the racing field are also bound by this rule. Any complaints shall be addressed to:

Lloyd Axworthy
Minister of Human Resources Development(Does he have a Blue Hard-hat?)
14th floor
140 Promenade du Portage
Hull, Quebec, K1A 0J9

15. Protective Apparel

All charioteers are required to wear protective headgear. All other participants are strongly encouraged to wear the same (how can all these people wear the same helmet?).

16. Loans

All chariots, stolen or otherwise removed or damaged, must be returned in its original condition (judges discretion) no later than 10:00 a.m. the day of the Race or the thieving discipline will be disqualified. All alterations made to said chariots must not be irreparable or the offending team will be immediately disqualified and treated in an extremely nasty fashion.

17. Judge

The soul Judge of the Chariot Race shall be the current Blue and Gold Chair. One other persons may be appointed Assistants to the Judge. The Judge and the Judge Ass. must be fourth year (in spirit) students of the Faculty of Applied Science and Engineering at the University of Toronto and must not be in the same course or have the same first initial or astrological cosine. In

■ (continued on page 6)

SPORTLIGHT

Trampolinist Bounces Through Skule™

BY ILAN KELMAN
ENG SCI ENV 9T6

In October, Franny Jewett (CIV 9T7) skipped a week of her classes in order to spend time on Portuguese soil. Or, more accurately, above Portuguese soil, since she was competing in the 1994 World Trampoline Championships. Franny headed to Europe ranked first in Canada in both the individual and synchronized trampoline events, while still being extensively involved in Skule™ and maintaining her marks.

Athletics have been a major part of Franny's life since the age of six when she was enrolled in gymnastics at the University of Toronto. Her beginnings may have been slightly inauspicious ("When I was younger, I climbed everything and so my parents put me into gymnastics"), but after spending grade 4 in artistic gymnastics at Seneca College's athletic school, Franny found her niche: she was asked to join the Canadian Women's Trampoline Team. "I didn't have what it takes to be a gymnast," she recalled, "but I had the air sense needed to be a trampolinist".

The sport involves bouncing high on a trampoline in order to do twists, turns, tumbles, and any other creative manoeuvres. In the preliminary round of a competition, every competitor runs through two routines: the compulsory and the voluntary. The compulsory routine consists of ten "relatively easy" skills which are executed successively and are marked on form. The voluntary routine is marked on both form and difficulty, so the competitor must strike a balance while choreographing the routine. The top ten trampolinists from the preliminary round enter the final round in which only the voluntary routine is performed. In synchronized trampolining, the skills are performed in unison with a partner.

Franny was recruited into trampolining by Dave Ross, a former trampolinist, who is still her coach today. "I've been really lucky," she commented. "He is the best coach in Canada...he manufactures the best trampolines in Canada, and he owns and runs a trampoline training club. It is his life." In grade 8, she moved from Seneca College to Branksome Hall in Toronto. For grade 9, she settled

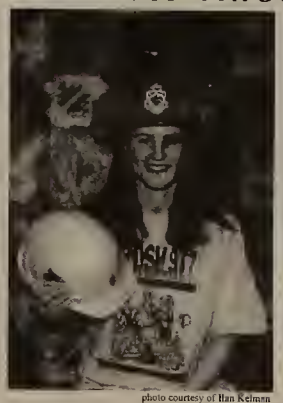


photo courtesy of Ilan Kelman

into the Academic Program for Gifted Athletes (APGA) at Earl Haig Secondary School in North York.

After graduating from Earl Haig SS in grade 12 with numerous academic and athletic accolades, she entered Skule™. "I always liked math and science and wanted a professional faculty, so I picked civil," she explained. "Also, both my grandfathers were U of T civil engineers." Her father's father, in fact, was 3T2's Eng Soc Prez. U of T is also close to the National Centre for Canadian Trampoline in Richmond Hill where Franny trains for two hours a day, five days a week.

Her training has transformed her into one of Canada's most successful trampolinists. She was the National Champion in 1988 and 1989, but slipped to 4th place in 1990 after two vertebrates cracked from stress. During the long healing process, she managed 3rd place in Canada in 1991 and has placed 2nd in 1992, 1993, and 1994. The ranking system, in which Franny is 1st in the country, is based on three competitions prior to the National Championship. The World Championships are held every two years. Although she placed 25th out of 50 in 1992, the result "was not good enough" for her. In 1993, Franny rebounded to become the Champion of the Pacific Rim Countries. For the 1994 Worlds, she advanced to 23rd out of 66 in the individual event and 19th out of 40 in the synchronized event. "The breakup of the Soviet Union made a big difference," she commented, "because we competed against world-class athletes from all the new countries, but a lot of people said that I had improved from last time, which was nice to hear."

Competitions have taken Franny to eight countries on four continents but the time commitment does not seem to bother her. "My brother is on Ontario's Cross-Country Ski Team and both my parents are doctors," she reflected, "but despite being busy, we are still a close family. I also spend a lot of time at school with friends, and involved in activities." Always wanting to remain in motion, Franny was last year's First Year Chair, a vice-chair for this year's Orientation Committee, and is currently running the High School Liaison Committee.

At Earl Haig, she was captain of the Alpine Ski Team "but never really got into the high school theme; I am much more involved with engineering...I really like the people and the attitude in engineering, and I have similar qualities." As for marks: "I don't think that (trampolining) hinders me too much. It helps me be organized and get things done and, at exam time, my training gives me a break from studying." Her professors are generally apathetic towards her athletic involvement, although at least one "was not impressed" that she had to miss classes in order to compete in the Worlds.

Franny's future is uncertain: "I enjoy school and the thought of getting a job for the rest of my life is scary." Graduate school in engineering is unlikely but she definitely wants to obtain a P. Eng. and "then a law degree or M.B.A. Or I may change my mind." Her trampolining future is also up in the air as "I will see how I feel after 1994". The 1996 Worlds are being held in Vancouver. Competing for her country in her country would be a fantastic experience but, "Although I love the sport, after ten years it's not as exciting". Dealing with the pain of her slipped disk from last year is also a consideration. In any case, coaching and judging will definitely be a part of her future because "If you take as much from a sport as I have, you have to put a lot back in".

Looking back, "I don't regret anything. Engineering was one of the best choices I ever made and, while I shouldn't have gone into gymnastics, I would never have found the trampoline without it." Life might be tough sometimes but "I just have to keep working and everything will be fine. I feel better about myself by being fit and I have more confidence in myself" from the athletics/engineering mixture. (Franny will be flying to Denmark for a Competition early this month.) □

UPCOMING EVENTS

Women's Ice Hockey
December 1 @ 7:00 pm
January 10 @ 7:00 am
January 20 @ 7:00 pm
January 26 @ 7:00 pm
January 30 @ 7:00 pm
February 9 @ 7:00 pm
February 20 @ 8:00 pm

Men's Div I Basketball
January 10 @ 8:30 pm
January 17 @ 7:00 pm
January 23 @ 8:00 pm
February 6 @ 7:00 pm
February 20 @ 8:30 pm
March 1 @ 8:00 pm

Men's Div I Volleyball
January 11 @ 8:00 pm
January 17 @ 9:30 pm
January 25 @ 8:00 pm
February 1 @ 9:30 pm
February 8 @ 8:00 pm

Congratulations, Johanne!

BY THE CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS

Launched under the stewardship of the Canadian Council of Professional Engineers (CCPE), the 1989 Canadian Engineering Memorial Foundation is a fully constituted Foundation and is registered as a charitable organization. The Foundation seeks to increase the opportunity for young people, particularly women, to prepare for, receive training and an education in engineering. Each year, the Foundation awards a Scholarship to a student in the First Year of Engineering, the Final Year of Engineering, and at the Graduate Level.

The winner of the Scholarship Award - Final Year of Engineering is our very own Johanne Heald:

Johanne Heald of Nepean, Ontario is studying aerospace engineering at the University of Toronto. A top student who has been an active member of the Engineering Society at the university, she has participated in many committees including the Women's Issues committee and the Professional Development committee. She says her ambition is to be an astronaut, a dream she's had since she was eight years old.

AROUND SKULE™ AROUND

Do You Want $28,000?
The Ontario Engineering Competition

BY KAREN LEV, VP EXTERNAL
CHEM 9T5

Well, you can't have it. You may, however, win prizes worth $3000, $2000, $1500, $1000, $750 or $500 by placing first, second or third in the 1995 Ontario Engineering Competition, to be held February 17-19 1995.

What, you ask, is the OEC? If you read this article through to the end, you will learn the basic facts of the competition. To get more information contact the people at the end of this article!

For the past 15 years, the Ontario Engineering Competition has provided a forum for engineering students to display their skills and talents in a competitive environment. At the same time, these students gain valuable experience through contact with industry professionals. The OEC is an excellent opportunity for students to learn about their own strengths and ingenuity. OEC-CIO '95 will be hosted by Ryerson Polytechnic University located in our own fair city of Toronto. The majority of the competition will be held on the campus and the competitors will be accommodated at the Delta Chelsea Inn.

To be eligible for the competition, all competitors must be full-time undergraduate engineering students enrolled in an accredited program in an Ontario university. (Don't worry, we are accredited!) An application form must be completed and received in the OEC office on or before January 27, 1995. Apply early to ensure your position before quotas are filled! Note: No competitor will be permitted to compete in more than two categories.

The OEC Categories:

Entrepreneurial Design

First Place: The Northern Telecom Award

The goal of this category is to encourage students to design a marketable product or service not currently available in Canada. Winning projects will combine both technical feasibility and innovation with marketability of the product or service proposed. Projects may be entered by teams of up to four people, and are chosen for presentation at the competition based on the merits of the project as illustrated in the single page abstract submitted with the application. Both an exhibit and an oral presentation are required.

Past projects that have been successful include:
-Transient Dynamometer
-Automobile Shock Absorber Test
-Packsoft—Software Development for Product Packaging
-Computer Tools for Stormwater Management Modelling
-Economical Lifting Chair (U of T entry, 3rd place winner)

Corporate Design

First Place: The Ontario Hydro Award

This category is intended to provide students with the opportunity to design a solution to a situation currently faced by industry. The first series of problems submitted by corporations has been received by the OEC office. Students may also enter projects which are not included in the package (e.g. thesis or work term projects), with permission of the company or organization to allow the work to be displayed in a public forum. An abstract must also be submitted with the application and teams may be of up to four people.

Projects that have been successful include:
-The Development of an RTNOP-Solver Using Applied Artificial Life
-Semi-Automated Lift Assist Device (2nd place UofT project)
-Solidification of Hazardous Wastes

Editorial Communications

First Place: The Bell Canada Award

The goal of this category is to encourage students to develop communication skills and the ability to develop and support their personal viewpoint. The projects are required to examine the sociological impact of a current technological issue and should address economic, environmental or social effects. Teams of up to two members may enter. A one page summary of the topic must be submitted with the application form.

Past topics that have been successful include:
-Engineering our Environment (3rd Place U of T entry)
-The Social Implications of Virtual Reality
-Communication of Today, Or the Lack of It

Explanatory Communications

First Place: The Professional Engineers of Ontario Award

This category requires competitors to describe a complicated technical process or issue in lay terms, such that the public or a person not familiar with the topic gains a clear understanding. Teams of up to two members may enter. A one page summary is required with the application form.

Topics that have been successful include:
-How a Compact Disc Player Works
-Oriented Polymers: A Plastic Bridge?
-Operation of the CANDU Reactor
-Silly Rabbit, Thermodynamics are for Kids

Parliamentary Debate

First Place: The Silver Tongue Award sponsored by the Sandford Fleming Foundation and the Consulting Engineers of Ontario

The goal of this category is to apply analytic skills and to present a well-reasoned viewpoint with minimum preparation. Using the format of parliamentary-style debate, competitors defend or refute a previously undisclosed resolution. Teams will consist of two students. Previous debate topics include:
-Engineering is social experimentation
-The soldier does not attack
-Good fences make good neighbours

(Last year's second place prize went to UofT students!)

For more information, contact:

Karen Lev, VP-External
UofT Engineering Society
Sandford Fleming Bldg. Rm B670
Phone: (416) 978-2917
e-mail: engsoc@ecf.toronto.edu

OEC '95 Organizing Committee
Phone: (416)979-5000 ext.7094

(continued from page 4)

addition, two other judge positions will be auctioned off during the charity auction on the Wednesday of Godiva Week.

The Judge can disqualify a chariot, even if it finished the Race first, if it has broken any of the above said rules. The winner can be declared at any time after the Race but a champion must be declared before July 26, 1884. Once a winner is declared, the decision is final. If, upon declaring a winner, any discipline falsely claims to have won the Chariot Race immediately preceding, they shall be reprimanded by the Blue and Gold Chair and made to provide items pursuant to Rule 18 below in order to lift the sanctions automatically imposed arising from such deception.

The rules can be changed 48 hours before the Race by the Blue and Gold Chair only.

18. Bribes

Only "liquid" assets will be considered as legal bribes. All other bribes are illegal but, in keeping with the spirit of competition and sportsmanship, will still count. Bribes MUST be submitted to the Blue and Gold Chair personally at least two (2) hours before the start of the Race. No conditional bribes will be accepted (or at least honored).

Note: Judges work better when fully fueled!

Signed, this 21st day of November, 1993: this 21st day of November, 1993.

Ken E. Gower

Ken Gower
Chair, Blue & Gold Committee

SHARE THE WARMTH

Share the Warmth is a campaign to provide less fortunate people with warm clothes for the cold season to come.

Please bring your old mittens, gloves, scarves, hats, toques, sweaters, or coats. Blankets and sleeping bags are also welcome. You can leave these items in the Share the Warmth drop-off box in the Engineering Society (SF B670). We would like to fill at least the one box that we already have so, please, search through your old clothing that you are not using anymore and Share the Warmth.

It's an easy way to help those in need. The deadline is December 2, 1994.

For more information, please call the SAC office at 978-4911.

SKULE™ AROUND SKULE™

Unsolved Mysteries
Industrial Engineering Defined

BY TERRY JOHNSTON
CAREER CENTER LIAISON

One of the least understood of all engineering disciplines, at least in terms of the skills that they can bring to an employer, is Industrial Engineering. The Faculty of Applied Science and Engineering defines Industrial Engineering as a program which focuses on the analysis, design, improvement, and operation of integrated systems of people, materials, equipment, and information. In spite of this concise definition, many employers and students still ask how exactly can these skills that industrial engineers learn be applied in a work setting.

In order to get a little better understanding of what an Industrial Engineer actually does upon graduation, I recently spoke with Paul Tessy, IND 9T0, Manager of Corporate Development for National Grocers. Prior to accepting employment with National Grocers, Paul entertained offers of employment from Dofasco, Northern Telecom, Du Pont and a number of other companies. He noted, however, that after reviewing all of these offers he decided that National Grocers was the best place to put his skills to work.

When I asked him how well his degree had prepared him for his position with National Grocers, Paul noted that his education had give him a set of 'core competencies' that he utilizes every day. In short, his education has given him a good foundation for his job. He went on to explain that when he started with National Grocers, he was using standard industrial engineering practices to help develop both the human and economic potential of the company; in the past few years, however, National Grocers has moved beyond traditional practices and is working on a number of initiatives including the development of cross-functional work teams. These initiatives are aimed at improving the relationship between the people and the processes within the organization. Paul noted that part of his role is to develop mechanisms to improve the various processes which occur in day-to-day business; because National Grocers views people as resources to be developed, it is their belief that improving the condition of the minds within the various mechanisms will have a long-term positive effect on their success.

In terms of the success of current students within the Faculty of Applied Science and Engineering, Paul had the following pieces of advice to offer: First, get involved in extracurricular activities. Secondly, have the ability to apply what you have learned in Skule. Thirdly, develop communication and interpersonal skills which are critical in business today. You can have the brains of Einstein but if you can't communicate ideas effectively, your brain power is wasted. Finally, Paul suggested that students learn to keep a balance between their studies and other parts of their lives: today's employers are looking for bright students who are also well rounded in terms of their experience.

Students who are interested in gaining some experience and a further insight into what engineers do in their particular discipline should consider participating in the Career Centre's Extern Program. Extern can provide you with an opportunity to shadow someone in the career area of your choice. For information on the May program, visit the Career Centre today. □

Annual Blood Donor Clinic

BY MIKE PASZTI
ENGINEERING SOCIETY SECRETARY
CHEM 9T6

The Sir Sandford Fleming Cafeteria was the location of the Engineering Society's annual Red Cross Blood Donor Clinic on Tuesday, November 29. The turnout was excellent! The purpose of the clinic was to collect as much blood as possible to boost sagging supplies. Something that I learned from this clinic is that each pint of blood donated is used for more than one purpose. Collected blood is screened for various diseases and then split into four components: plasma, red blood cells, platelets, and white blood cells. One person's donation goes a long way to help many people.

At last year's clinic, about one hundred people gave blood. This year, though the numbers aren't in yet, it appears as though the previous year's total was easily exceeded. The turnout might have been even higher had there not been another blood donor clinic a few weeks earlier in the Medical Science Building. Nonetheless, I think the major reason for the increased turnout was the "Civ Challenge". A week before the Donor Clinic, Civil 9T5 (self-proclaimed *Class of the Year*) formally challenged the other engineering classes to see who could get the highest percentage of people to donate blood. Unlike other Engineering Society competitions (see Chariot Race), F!rosh classes were actually allowed to win. The victors of this challenge claimed the title of *Class of the Year* (who cares?!) and a huge amount of BEvERages (now we're talking!), courtesy of the Civ Club, Social Committee, and Engineering Society. A bribe, you say? Maybe, but it was for a good cause. :) □

Fourth Year Report

BY WALTER STODDARD
CO-CHAIR, FOURTH YEAR COMMITTEE
NΨ✈ 9T5

Repeated for the memory impaired, Gradball is at the Marriott Hotel (Eaton Centre - Bay and Dundas) on March 18th, 1995. If you are interested in renting a room for overnight, call the Marriott ASAP (597-9300). If you tell them you are with the Engineering Function on March 18th, it will cost $103 for a single or double, plus $10 per extra person past two (up to four). If you want to be a little more extravagant, they are offering suites for $300. This was repeated, for those of you with bad memories.

The cost of Gradball itself is only $50, (same as always, inflation be damned!), but if you are looking for a FREE ticket, pay close attention. If you submit artwork that is chosen for this year's Gradball tickets and posters, you will win a free ticket to Gradball. All submissions must be put in the Fourth Year Committee mailbox in Eng. Soc. before Jan. 16th, 6pm, with the artist's NAME, CLASS and PHONE NUMBER on an attached form. Artwork will be judged by a panel chosen from the Fourth Year Committee membership. Keep in mind that it must be appropriate for a formal dinner/dance/broo-hah-hah, needs to be easy to replicate and the fewer colors, the cheaper, i.e. the better (for example black, white, blue and yellow, but don't let this factor put a cramp in your creativity; if it looks good, submit it).

In case you are still having problems with your Grad Photo (we know of none, but just to be safe), here is the photographer and his phone number: Brian Toll @ (905) 607-2949. If a difficulty is still lingering, let us know, we will try to help.

Finally, the 9T5 Days to Iron Ring Party was fantastic. Special thanks to Mike Cianchetti and Mauro De Franco for finding us the Limelight to dance/drink 'til we dropped in. Ticket sales passed the 200 mark! With a large portion being bought by Civ 9T5 and Elec 9T5. Good work all around! □

NΨ

BY AARON STEINMAN
CLUB CHAIR
NΨ 9T5

The end of the semester can only mean one thing - it's time for the NΨ Semester End Smoker. This awesome Smoker will be taking place on Thursday, December 1st at 4pm in our Common Room (GB147). Come on out, this will be your last chance to relax before exams.

On Saturday, November 12, the NΨs had our annual Dinner Dance. We had over 140 people show up, including three tables of F!rosh. After we ate our fill with tasty dinner and heard all the speeches, we danced well into the morning. Our party was so good that the DJ himself was out on the packed dance floor. A special thank you goes out to Av for organizing this memorable evening.

Good luck on exams!! □

The Drive For Acceptance

The Drive is comprised of students and staff who are working to improve the atmosphere in Engineering for people of different cultures, genders, and sexual orientations.

Weekly meetings are at 1:00 pm every Thursday in WB 139.
Subscribe to our e-mail newsletter by sending a request to [naidoo@ecf].

ANNOUNCEMENTS

Remember your first summer job? Find out how to get one now at the...

Engineering Summer Job Search Seminar

Date: Wednesday, january 18, 1995
Time: 4:00 - 6;00 pm
Place: Mechanical Building, Room 102
(Hear it from the experts!)

Presented by the Career Centre and Eng.Soc. Pre-Register at the Career Centre Summer Desk.

RED RIBBON CAMPAIGN

World Aids Day:
December 1, 1994
Get your Red Ribbon in Eng Soc

PEY

PEY applications are due on December 21, 1994 by 3:00 pm. Please include two copies of your accis form for each application.

EXAMS

Last day of Engineering Exams:
December 20, 1994

Return to Skule™:
January 4, 1995

The Canadian Federation of Engineering Students represents over 40 student engineering societies across Canada. All undergraduate students enrolled in engineering at CFES member schools are considered full-time members. As members of the University of Toronto Engineering Society, each of you is a member of CFES. More information to appear in the upcoming Cannon. You may also send inquiries to Karen Lev, VP External, by leaving a message in her mailbox in Eng Soc or at engsoc@ecf.utoronto.ca.

Come on out to Christmas Suds on December 2

Compete in the Chariot Race and other Events during Godiva Week, January 9 to 14, 1995!!

Cannon Deadline

The deadline for submissions for the January issue of the Cannon is December 23, 1994. Please leave articles, disks, other contributions in the Cannon Mailbox in Eng Soc.

This is a reminder of the remaining Engineering Society Executive and Full Council Meetings for the academic year.

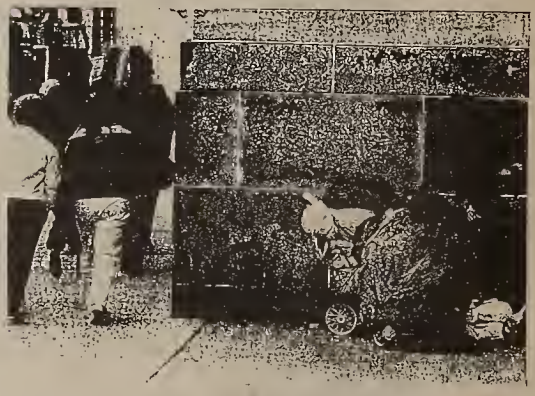
Month	*Executive*	*Full Council*
December	Wednesday Nov 30th	N/A
January	Wednesday 18th	Thursday 26th
February	Wednesday 8th	Tuesday 21st
March	Wednesday 8th	Thursday 30th
April	Wednesday 5th	N/A

MERRY CHRISTMAS,

AND

HAPPY NEW YEAR

DON'T TURN YOUR BACK ON THE HOMELESS



Share the Warmth

Please bring your old mittens, gloves, scarves, hats, touques, sweaters, or coats to the nearest *Share the Warmth* drop-off box.

It's an easy way to help those in need. For more information, please call the SAC office at 978-4911.

SAC

MONTREAL MASSACRE MEMORIAL

In recognition of the tragedy on December 6, 1989, please come out to show your respect for the memory of the 14 female engineering students murdered in Montreal. A banner-painting session will be held before lunch on Friday, December 2 in the Atrium to prepare for the 12:00 pm memorial service in front of the Sandford Fleming building. On Tuesday, December 6, the anniversary of the event, a second memorial service will be held in Convocation Hall at 10:00 am. The banners will be displayed at this time.

The Engineering Stores
announce the arrival of
Lined Spring Jackets and Embroidered Caps.
Get yours NOW!

Jackets: $55.00 Caps: $15.00

Stores Open Monday-Friday 12-2 pm.

■ (continued from page 1)

next year, how important could one day of classes be? We must all work together in this effort. Close communication is being kept with all universities as protests, rallies and demonstrations are being organized across the country. Right now, we have the town hall meeting coming to Toronto from Nov. 29 to Dec. 1 and there has been a call for a national student strike on Jan. 25th 1995.

The Future of Education committee is open to everyone. I want to hear all your comments, suggestions, concerns and opinions, but I can't do this alone. I urge everyone to get involved because only together, in large numbers, can we ensure the future of education, and the future of Canada.

You can leave any comments, suggestions or concerns in the CHEM III mailbox in Eng Soc, or e-mail me at khajado@ecf. Sign up sheets for the Future of Education Committee are also available in Eng.Soc. □